SHARP Service Manual

APSS

DOLBY SYSTEM ®

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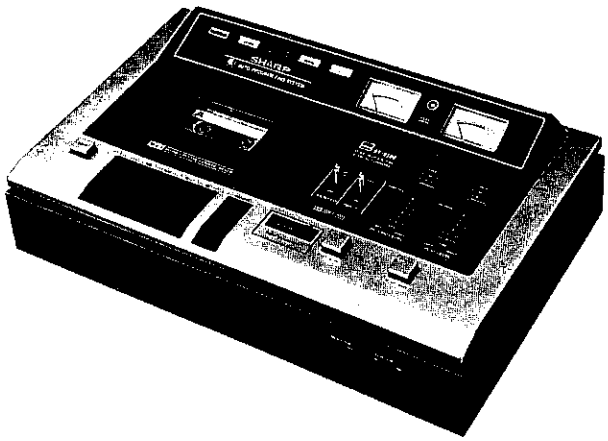


MODEL
RT-3500H

SPECIFICATIONS

Type:	AC operated 4-track 2-channel Solid-state Stereo Cassette Tape Record/Playback Deck with Built-in Dolby "B" type Noise Reduction & Full-automatic Stop System
Power Source:	AC 110/220/240V, 50Hz
Power consumption:	18 watts
Semiconductors:	6-transistor, 21-Auxiliary Transistor, 4-IC, 41-diode, 1-Silicon Controlled Rectifier, 1-Light Emission Diode
Dimensions:	16-7/8"(W) x 10-9/16"(D) x 4-1/2"(H) [428mm(W) x 268mm(D) x 114mm(H)]
Input circuitry:	Microphone jack 500 ohm x 2 REC/PB(DIN) Socket x 1
Output circuitry:	Headphones output jack 8 ohm x 1 REC/PB(DIN) Socket x 1
Tape:	Philips standard compact cassette tape
Tape speed:	4.8cm/sec
Record/Playback time:	60 minutes (C-60)
Recording system:	AC bias system (84 kHz)
Erasing system:	AC erasing
Fast forward & Rewind time:	75 seconds (C-60)
Wow & Flutter:	0.13% W.R.M.S.
Frequency responce:	40–15,000 Hz (Use of CrO_2 tape, DIN) 40–13,000 Hz (Use of normal tape, DIN)
S/N ratio:	56 dB (with Dolby NR system, use of CrO_2 tape, DIN) 52 dB (without Dolby NR system, use of CrO_2 tape, DIN)
Distortion:	1.0%
Channel separation:	34 dB
Erase ratio:	65 dB
Input sensitivity & input impedance:	Microphone 0.1mV @500 ohm REC/PB(DIN) Socket Low: 0.8mV, @10K ohm High: 40mV, @50K ohm
Output level & loaded impedance:	Headphones 1mW (0VU) @8 ohm REC/PB(DIN) Socket 410mV, @50K ohm

SHARP CORPORATION OSAKA, JAPAN

CABINET REMOVAL (Refer to Figure 1)

1. Depress the EJECT knob and take out the cassette.
2. Remove 2 RECORD LEVEL control knobs.
3. Remove 4 cabinet bottom retaining screws and cabinet bottom.
4. Remove 6 chassis retaining screws (Painted red). Now, the panel top is ready for removal.

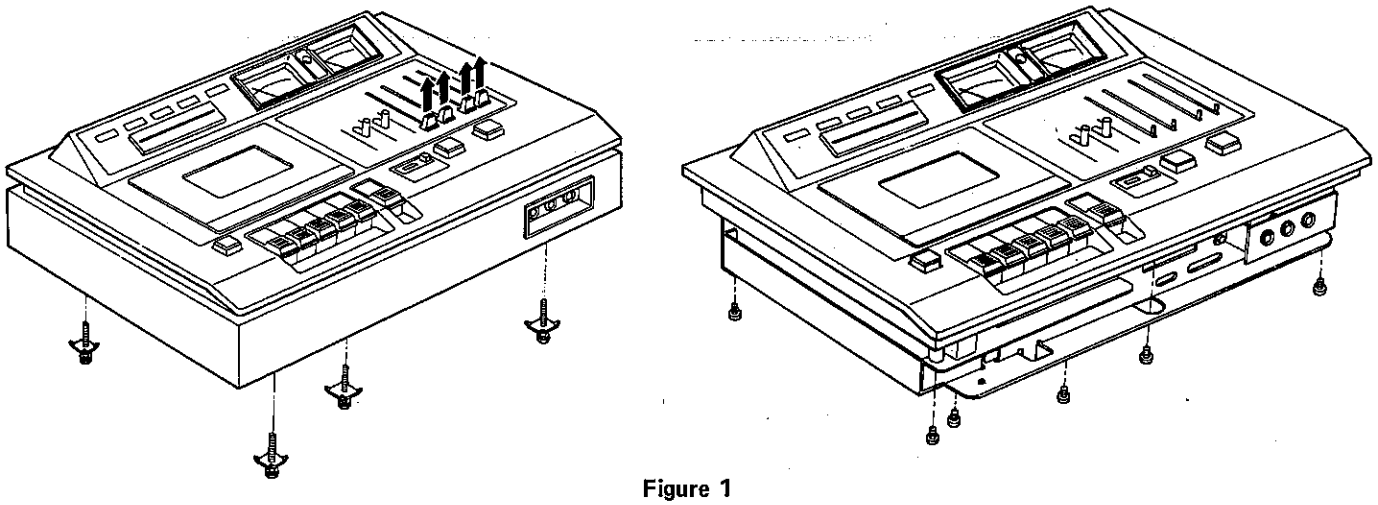


Figure 1

CrO_2 TAPE DETECTOR ADJUSTMENT (Refer to Figure 2)

1) Make sure that a clearance between the cassette detect lever bracket and mechanism mounting plate is about 1 mm.
2) Insert CrO_2 cassette tape into the unit and make sure that CrO_2 tape detect lever will be put in the aperture of CrO_2 cassette tape.
3) Under this condition, adjust CrO_2 tape switch (SW11) to be turned on.
4) Then, insert a normal quality tape in the unit and adjust CrO_2 tape switch (SW11) to be turned off.

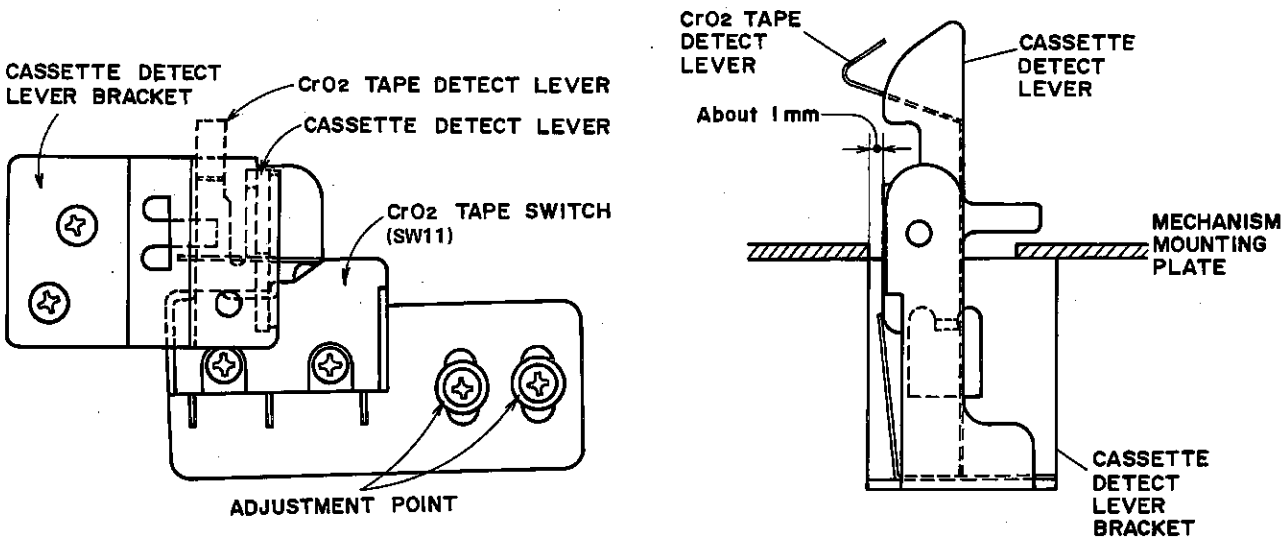


Figure 2

PRESSURE ROLLER PRESSURE ADJUSTMENT (Refer to Figure 3)

1. With power supply turned on, push the point A with use of tension gauge to make the pressure roller apart from the capstan shaft. Then, gradually release the tension gauge and read its value when the pressure roller starts to rotate.
2. It is normal when the tension gauge reads 260 – 312 gr. (9.2 – 11oz). If the above value is not satisfied, change the setting position of pressure spring.

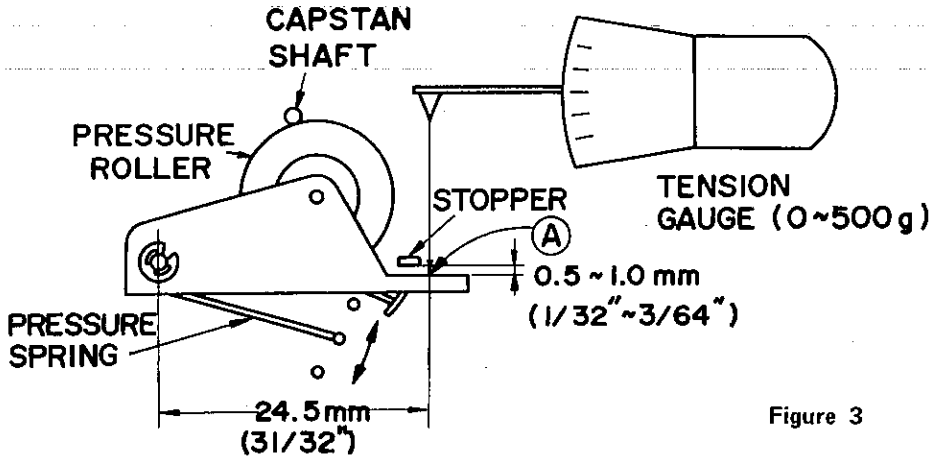


Figure 3

FLYWHEEL THRUST CLEARANCE ADJUSTMENT (Refer to Figure 4)

Slowly tighten the screw for flywheel thrust clearance until the thrust clearance becomes 0 (zero) and loosen the screw by 1/4 turn from this point. Since screw's pitch is 0.8mm (1/32"), thrust clearance of about 0.2mm (1/128") is produced.

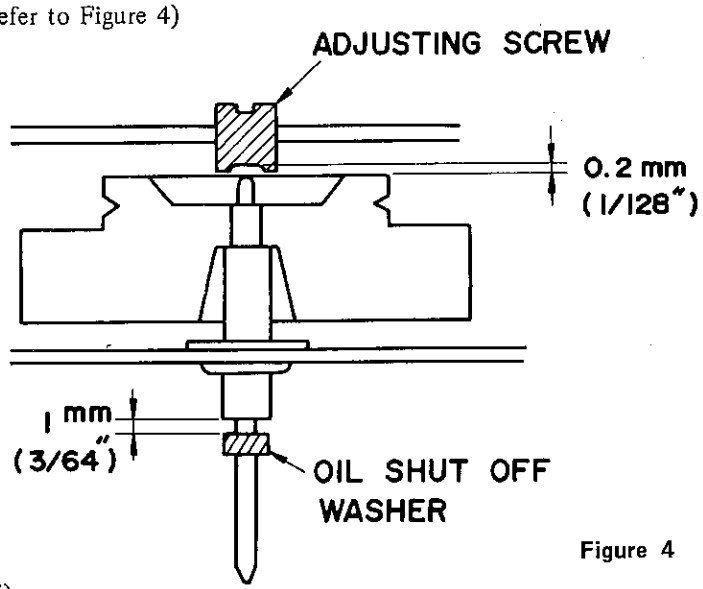


Figure 4

BRAKE MECHANISM ADJUSTMENT (Refer to Figure 5)

1. Check that the brake lever is pressed against the turntable in STOP mode and that the brake lever is apart at the same distance from the turntable in PLAY, FAST FWD and REWIND modes.
2. Adjust it by bending the adjustment point when the distance is abnormal.

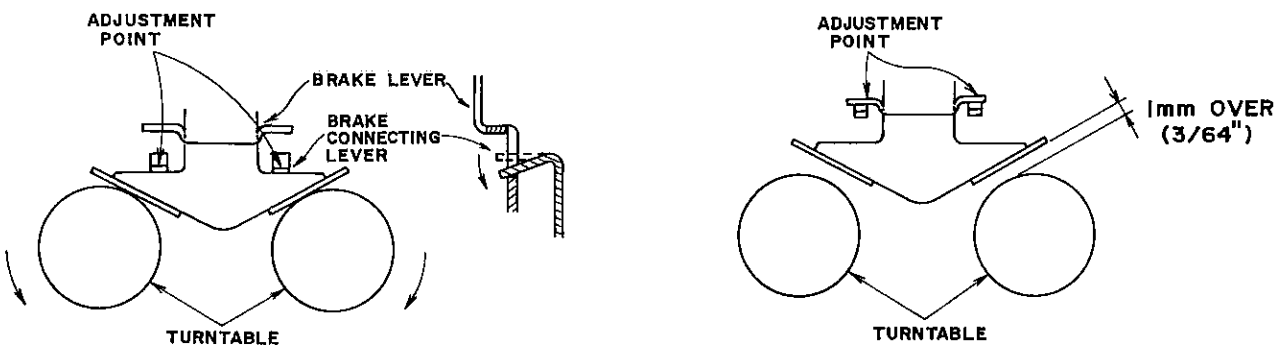


Figure 5

TORQUE CHECK (Refer to Figure 6)

1. Set the torque measuring reel to the turntable (to the take-up side at PLAY or FAST FWD mode and to the supply side at REWIND mode).
2. Then, rotate the reel in the same direction as for turntable and read the torque value when the pointer is stabilized.

Mode	Torque Value
PLAY	40 – 60 gr. cm
FAST FWD	Over 80 gr. cm
REWIND	Over 80 gr. cm

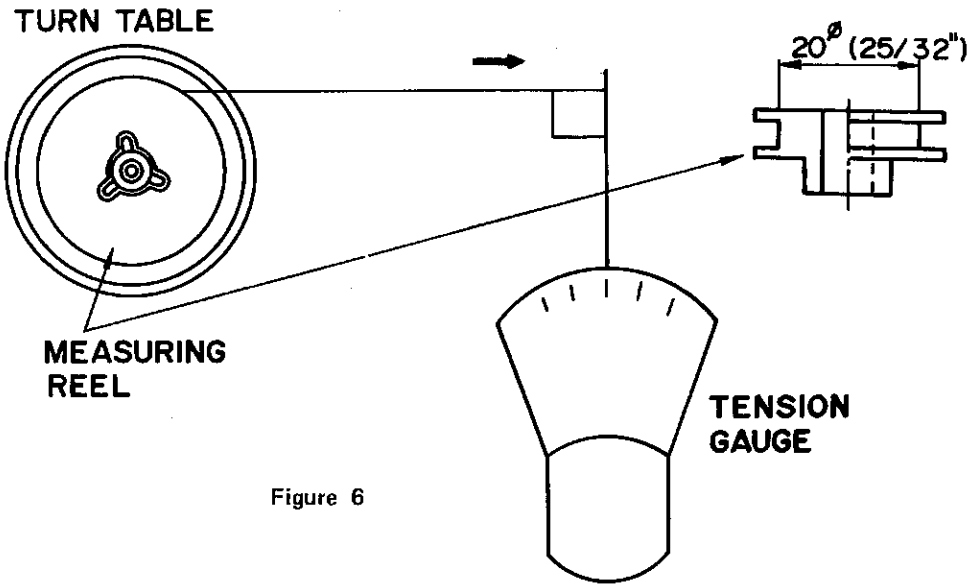


Figure 6

MOTOR SWITCH/MUTING SWITCH/SLEEP SWITCH SETTING POSITION ADJUSTMENT (Refer to Figure 7 and Figure 8)

1. Check that the brake connecting lever is pressed against the switch (SW8/SW9) in PLAY mode and that the brake connecting lever is apart at the distance from the switch (SW8/SW9) in STOP mode.
2. Adjust it by bending the adjustment point when the distance is abnormal.

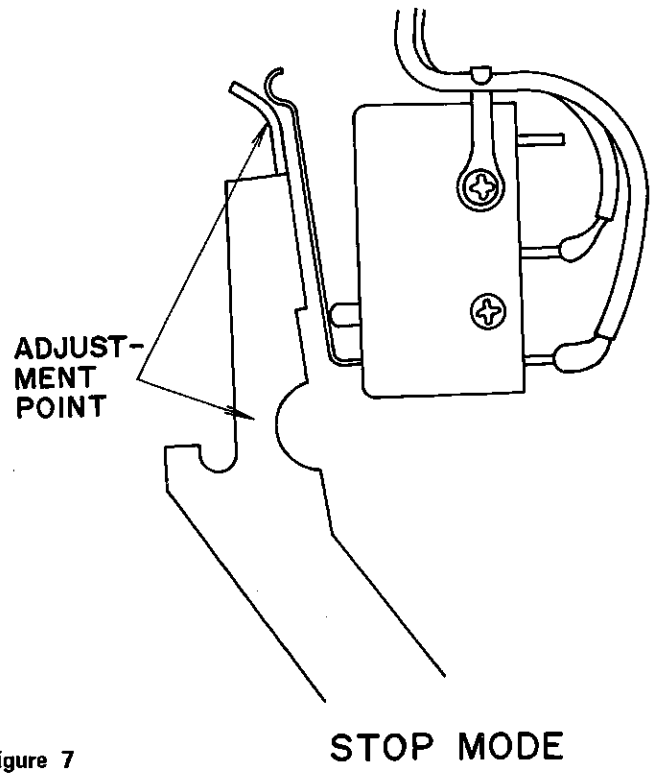


Figure 7

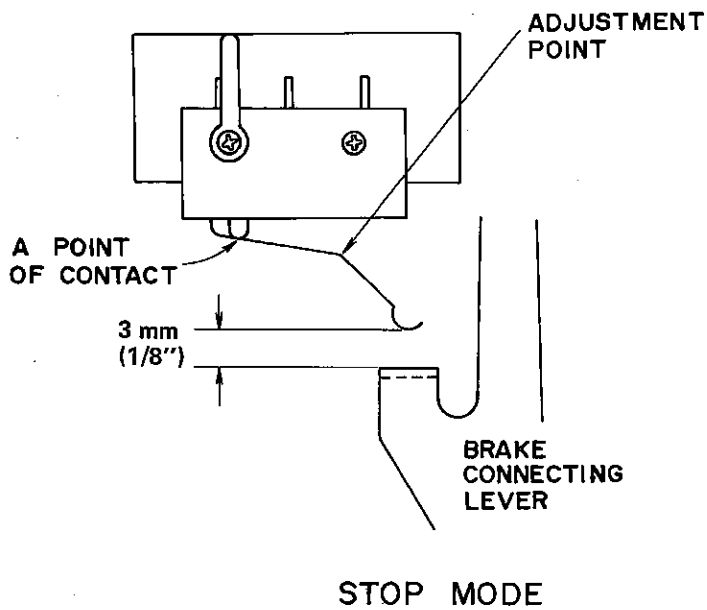


Figure 8

PAUSE SWITCH SETTING POSITION ADJUSTMENT (Refer to Figure 9)

Loosen the screw so that the contact clearance will be 0.5mm (1/64") in the STOP mode, as shown in Figure 9. Be sure the contact points touch with each other tightly.

MUTING SWITCH SETTING POSITION ADJUSTMENT (Refer to Figure 9)

Loosen the screw so that the contact clearance will be 0.5 ~ 1.0mm (1/64" ~ 1/32") in the PLAYBACK mode, as shown in Figure 9. Be sure the contact points touch with each other tightly.

BIAS SWITCH SETTING POSITION ADJUSTMENT (Refer to Figure 9)

Loosen the screw so that the contact points will be touch with each other tightly in the PLAYBACK mode.

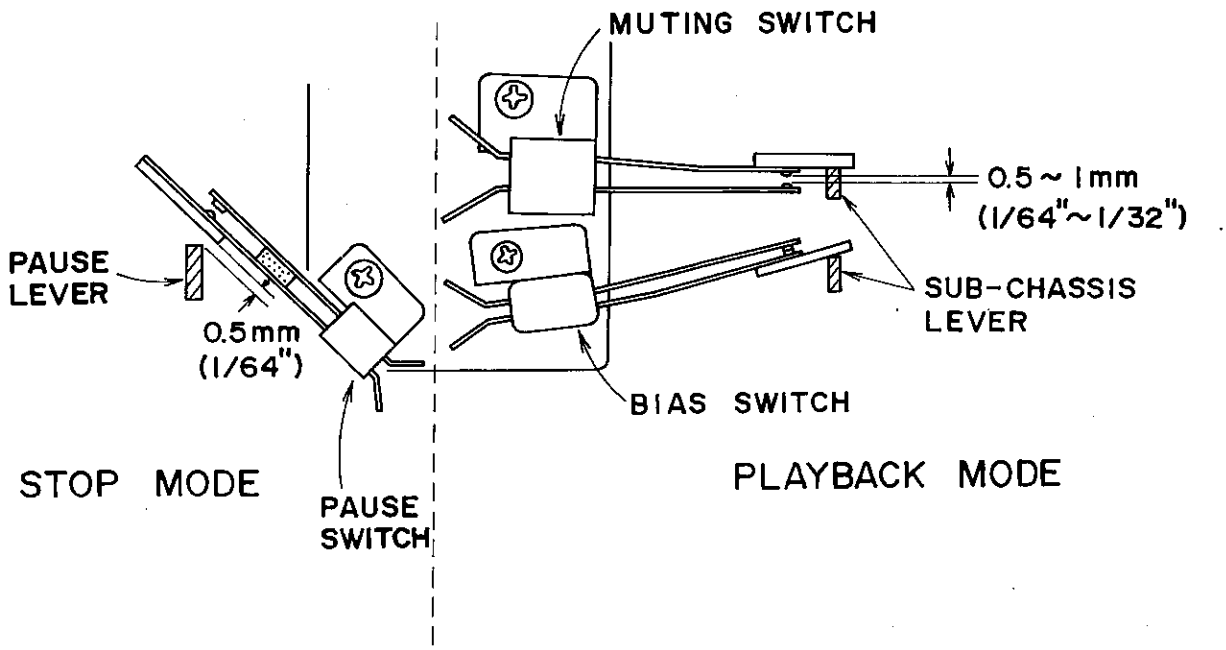


Figure 9

CHECK AND ADJUSTMENT OF TAPE SPEED

1. Measurement of tape speed
   a) Playback a test tape of 3,000Hz, available in the market.
   b) Connect a 50K ohms dummy resistor REC/PB Socket, and connect the input terminals of the speed meter or the WOW meter to the resistor.
   c) Adjust the measureable level by the PLAY LEVEL knob.
   d) It is normal when the regeneration frequency is within ± 1% of the meter.
2. Adjustment of tape speed
   When the results of mesurement are not satisfactory, take off oil on the belt or pulley. When the motor or the pulley does not smoothly revolve, feel oil or change the part. If the operation is still abnormal, adjust the semi-variable resistor (VR601 : Narrow Range, VR602 : Wide Range) on the motor board by using a screw driver.

Figure 10

ELECTRICAL ADJUSTMENT

RECORD AMPLIFIER BIAS OSCILLATOR ADJUSTMENT (Refer to Figure 11)

1) As shown in Fig. 11, connect the V.T.V.M. to the test point (TP6, TP7)
2) Set the CrO_2 Switch (SW11) in the CrO_2 position.
3) Set the unit at "RECORD" mode.
4) Then, connect the frequency counter to the output terminal of the V.T.V.M. and adjust the oscillation coil (L303) so that the bias oscillation frequency becomes 84 kHz.
5) Adjust the Semi-variable resistor (VR301, VR302) so that the V.T.V.M. reads 28mV.
6) To check the normal position, leave CrO_2 Switch (SW11) in the NORMAL position. It is normal if V.T.V.M.'s reading is 22 ~ 26mV.

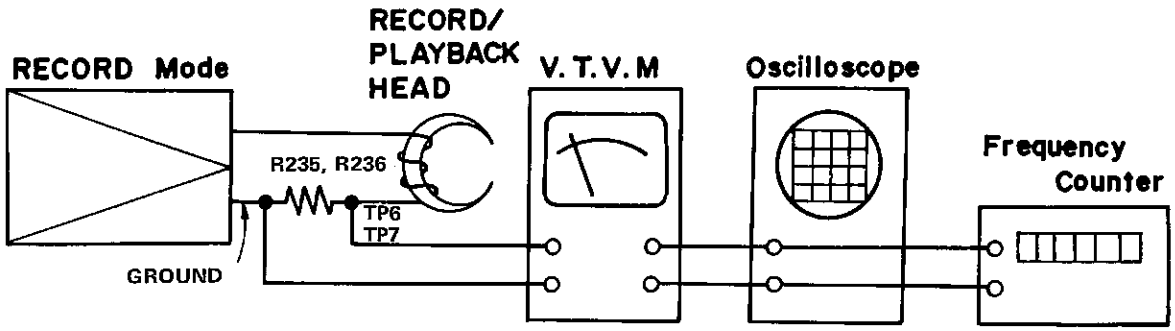


Figure 11

LEVEL METER SENSITIVITY ADJUSTMENT (Refer to Figure 12)

1) Connect the V.T.V.M. in between the test point (TP-1, TP-2) and earth.
2) With the unit set at "RECORD" mode, give it signal of –46 dB, 1 kHz from REC/PB Socket (SO101) and adjust RECORD LEVEL Control (VR103, VR104) so that the V.T.V.M. reads 580mV.
3) Set Dolby Noise Reduction (SW-4) in the off position.
4) At this time, adjust the semi-variable resistor (VR111, VR112) so that the level meter indicates Dolby Level (it means a level of "+ 3VU" indicated on the level meter.)

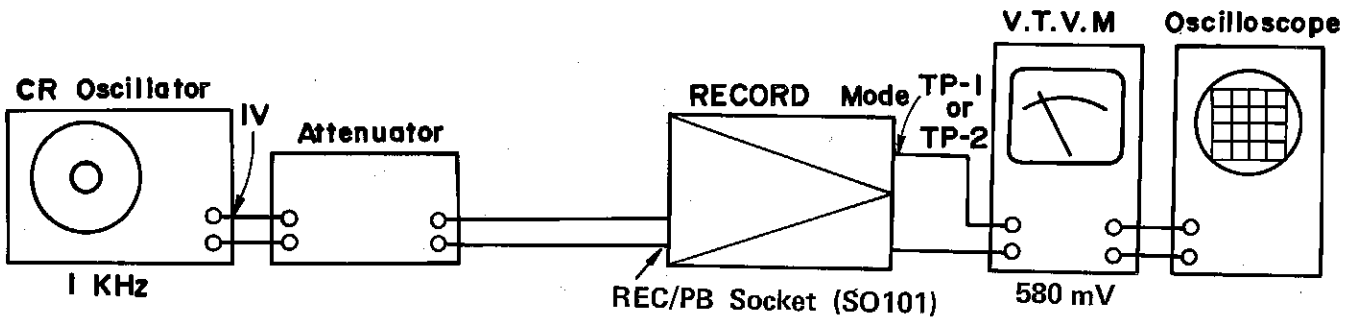


Figure 12

PLAYBACK SENSITIVITY ADJUSTMENT (Refer to Figure 13)

1) Set the unit at playback mode, and PLAY LEVEL Control (VR105, VR106) in the maximum position.
2) Connect 50K ohm dummy resistor to the REC/PB Socket (SO101) and connect the V.T.V.M. to its ends.
3) Load the unit with a test tape (MTT-150, 400 Hz recorded) and play it.
4) Set Dolby Noise Reduction (SW-4) in the off position, and CrO_2 Switch (SW11) in the normal position.
5) At this time, adjust the semi-variable resistor (VR101, VR102) so that the V.T.V.M. reads 580mV.

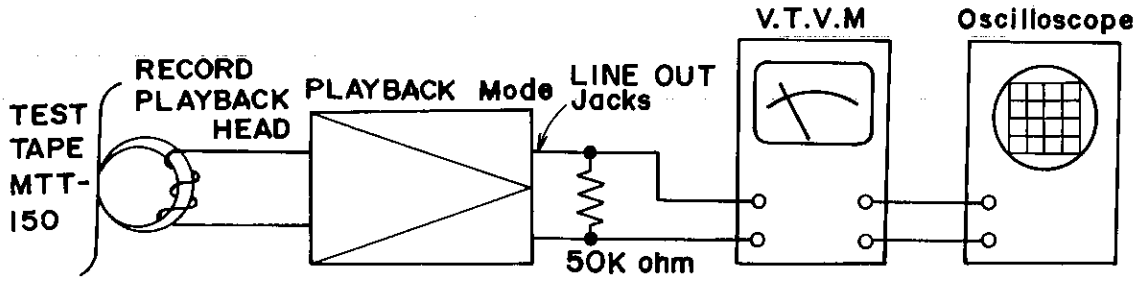


Figure 13

ERASE CURRENT CHECK (Refer to Figure 14)

1) Set the unit at "RECORD" mode.
2) Set the CrO_2 Switch (SW11) in the CrO_2 position.
3) Connect V.T.V.M. to the test point (TP3).
   It is normal if V.T.V.M.'s reading is 50 ~ 110mV.
4) To check the normal position, leave CrO_2 Switch (SW11) in the NORMAL position.
   It is normal if V.T.V.M.'s reading is 35 ~ 85mV.

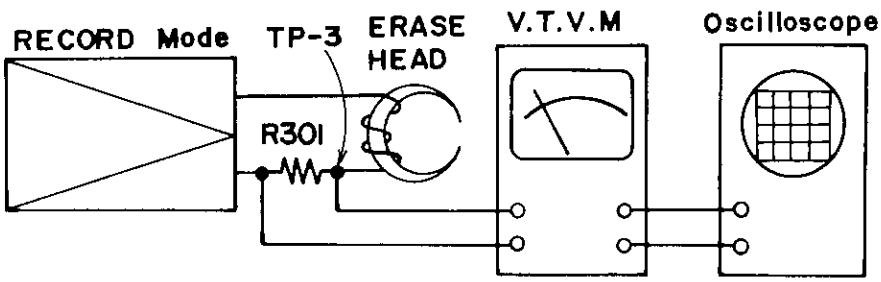


Figure 14

RECORD/PLAYBACK HEAD AZIMUTH ADJUSTMENT (Refer to Figure 15)

1) Set Dolby Noise Reduction Switch (SW-4) in the off position.
2) Set CrO_2 Switch (SW11) in the normal position.
3) Connect 50K ohm dummy resistor to the LINE OUT jacks and connect the V.T.V.M. to its ends.
4) Insert the test tape (MTT-114, 10 kHz Recorded).
5) Adjust the adjusting screw so that the playback output voltage of the test tape becomes maximum in both sides and the phase between channels gets same.

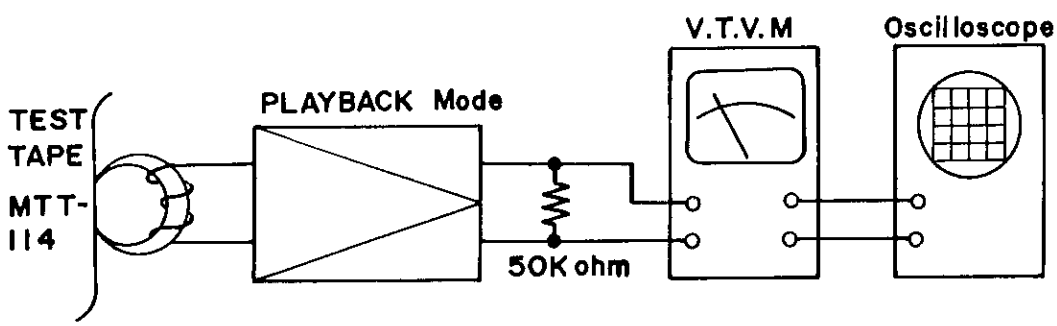


Figure 15

RECORD/PLAYBACK SENSITIVITY ADJUSTMENT (Figure 16)

1) Connect the V.T.V.M. in between the test point (TP-1, TP-2) and earth.
2) Insert the tape (non-recorded).
3) With the unit set at "RECORD" mode, give it signal of –46 dB, 1 kHz from REC/PB Socket (SO101) and adjust RECORD LEVEL Control (VR103, VR104) so that the V.T.V.M. reads 410mV (INPUT LEVEL Switch : LOW Position).
4) Set the unit at record mode, and playing it.
5) Adjust the semi-variable resistor (VR107, VR108) so that the V.T.V.M. reads the playback output voltage of 410mV.
6) To check the CrO_2 tape, leave CrO_2 Switch (SW11) in the CrO_2 position.
7) Adjust the semi-variable resistor (VR109, VR110) so that the V.T.V.M. reads the playback output voltage of 410mV.

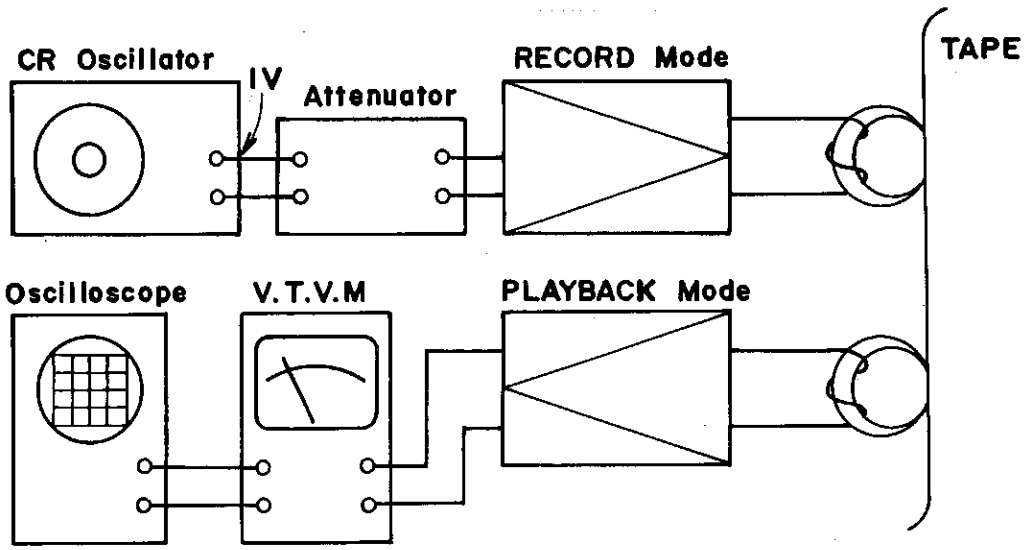
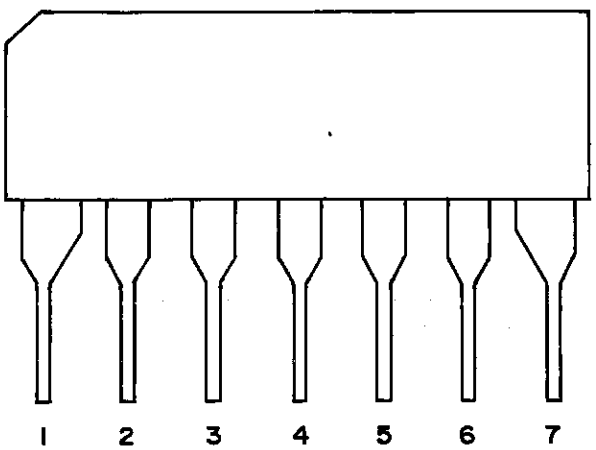


Figure 16

DOLBY NOISE REDUCTION CIRCUIT CHECK

Refer to "RT-2500H TECHNICAL INFORMATION".

IC101, IC102 RH-IX0437AGZZ



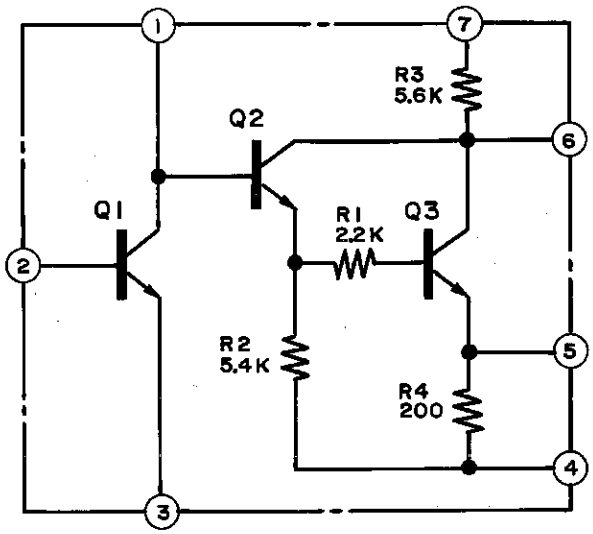
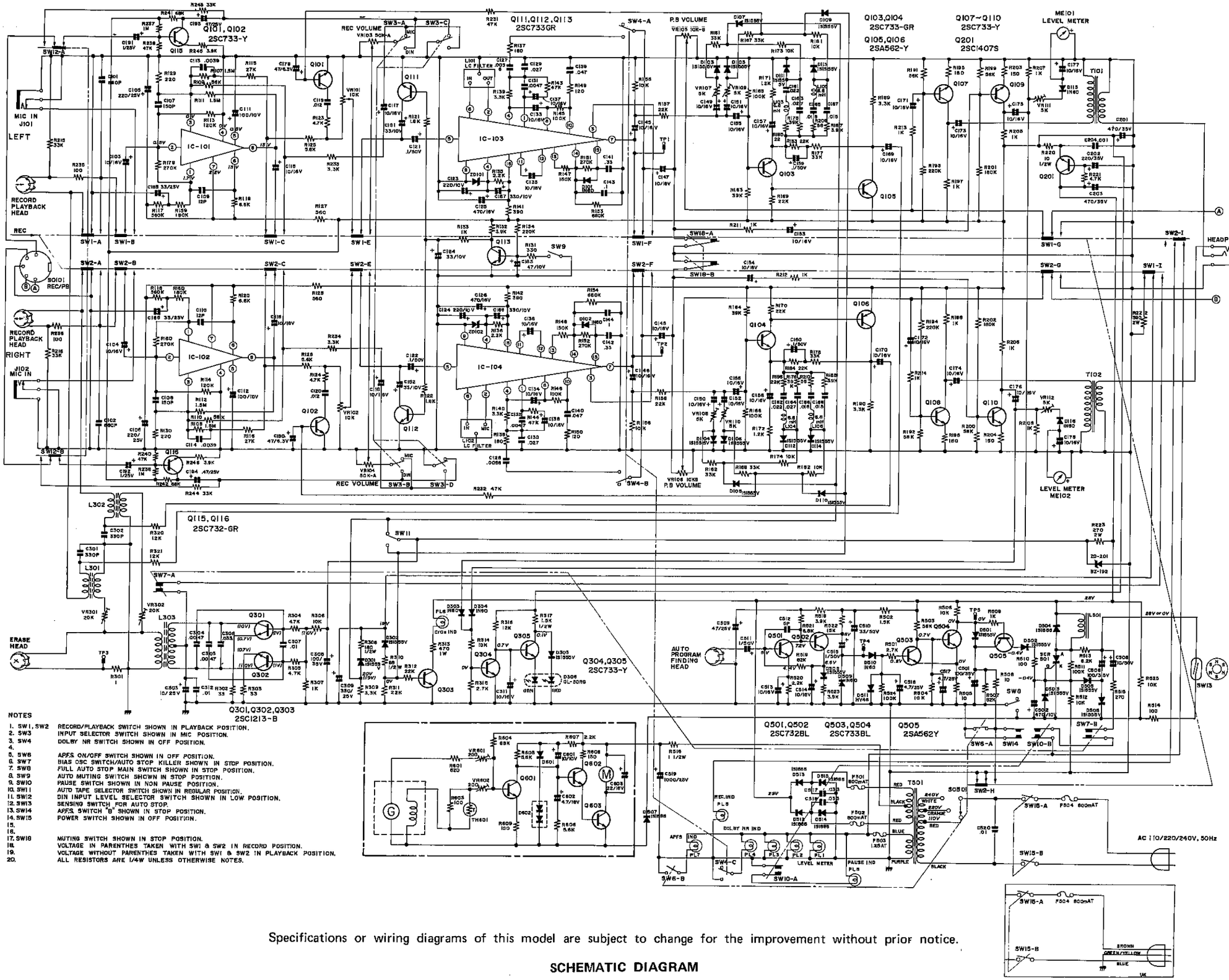


Figure 17

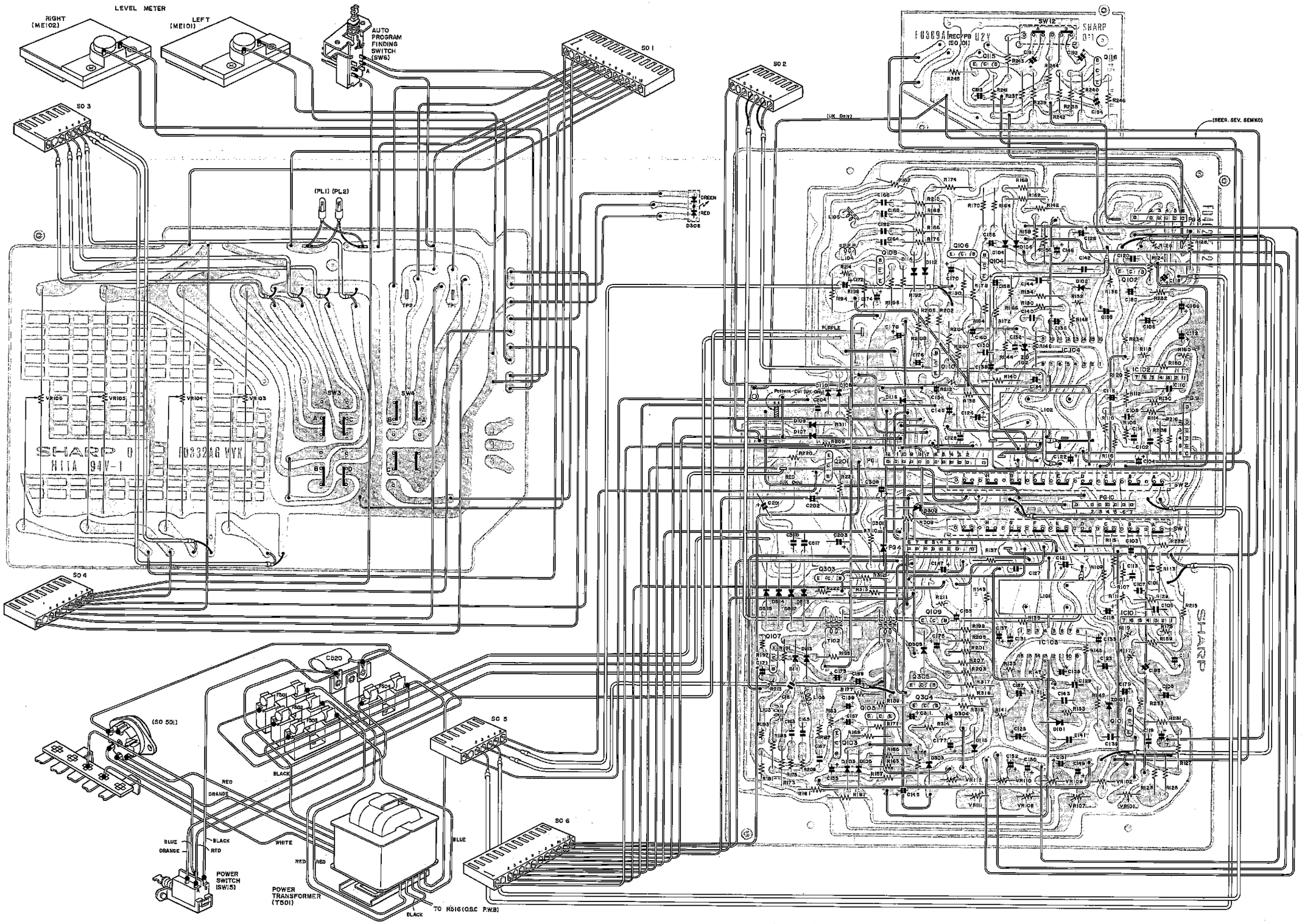


NOTES

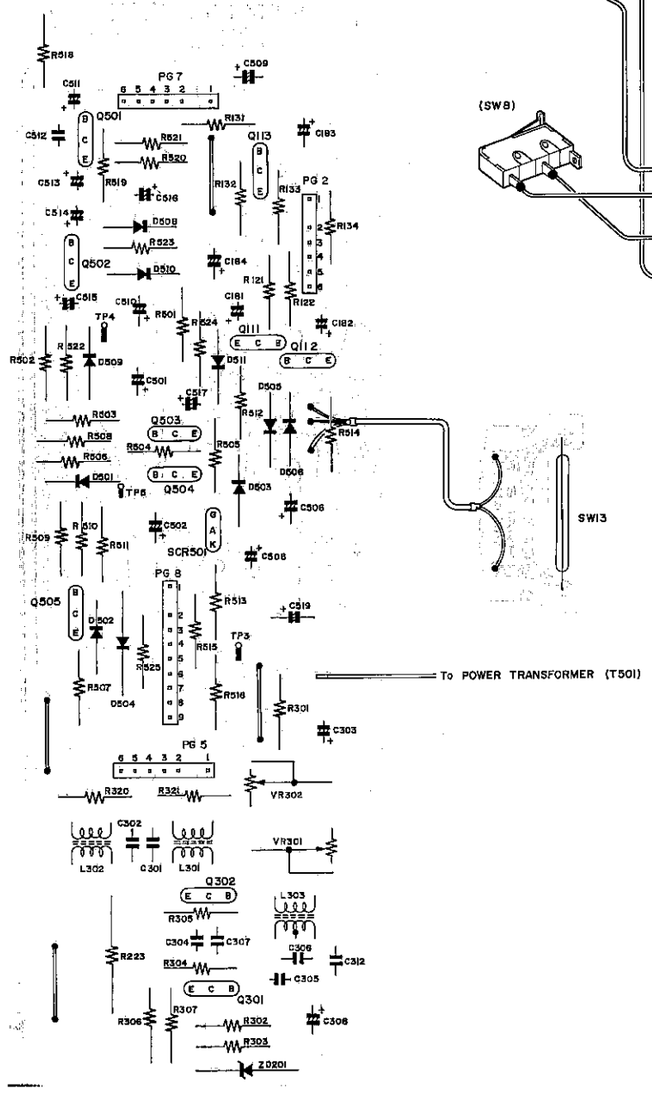
1. SW1, SW2 RECORD/PLAYBACK SWITCH SHOWN IN PLAYBACK POSITION.
2. SW3 INPUT SELECTOR SWITCH SHOWN IN MIC POSITION.
3. SW4 DOLBY NR SWITCH SHOWN IN OFF POSITION.
4.
5. SW6 APFS ON/OFF SWITCH SHOWN IN OFF POSITION.
6. SW7 BIAS OSC SWITCH/AUTO STOP KILLER SHOWN IN STOP POSITION.
7. SW8 FULL AUTO STOP MAIN SWITCH SHOWN IN STOP POSITION.
8. SW9 AUTO MUTING SWITCH SHOWN IN STOP POSITION.
9. SW10 PAUSE SWITCH SHOWN IN NON PAUSE POSITION.
10. SW11 AUTO TAPE SELECTOR SWITCH SHOWN IN REGULAR POSITION.
11. SW12 DIN INPUT LEVEL SELECTOR SWITCH SHOWN IN LOW POSITION.
12. SW13 SENSING SWITCH FOR AUTO STOP.
13. SW14 APFS SWITCH 'B' SHOWN IN STOP POSITION.
14. SW15 POWER SWITCH SHOWN IN OFF POSITION.
15.
16.
17. SW16 MUTING SWITCH SHOWN IN STOP POSITION.
18. VOLTAGE IN PARENTHES TAKEN WITH SW1 & SW2 IN RECORD POSITION.
19. VOLTAGE WITHOUT PARENTHES TAKEN WITH SW1 & SW2 IN PLAYBACK POSITION.
20. ALL RESISTORS ARE 1/4W UNLESS OTHERWISE NOTES.

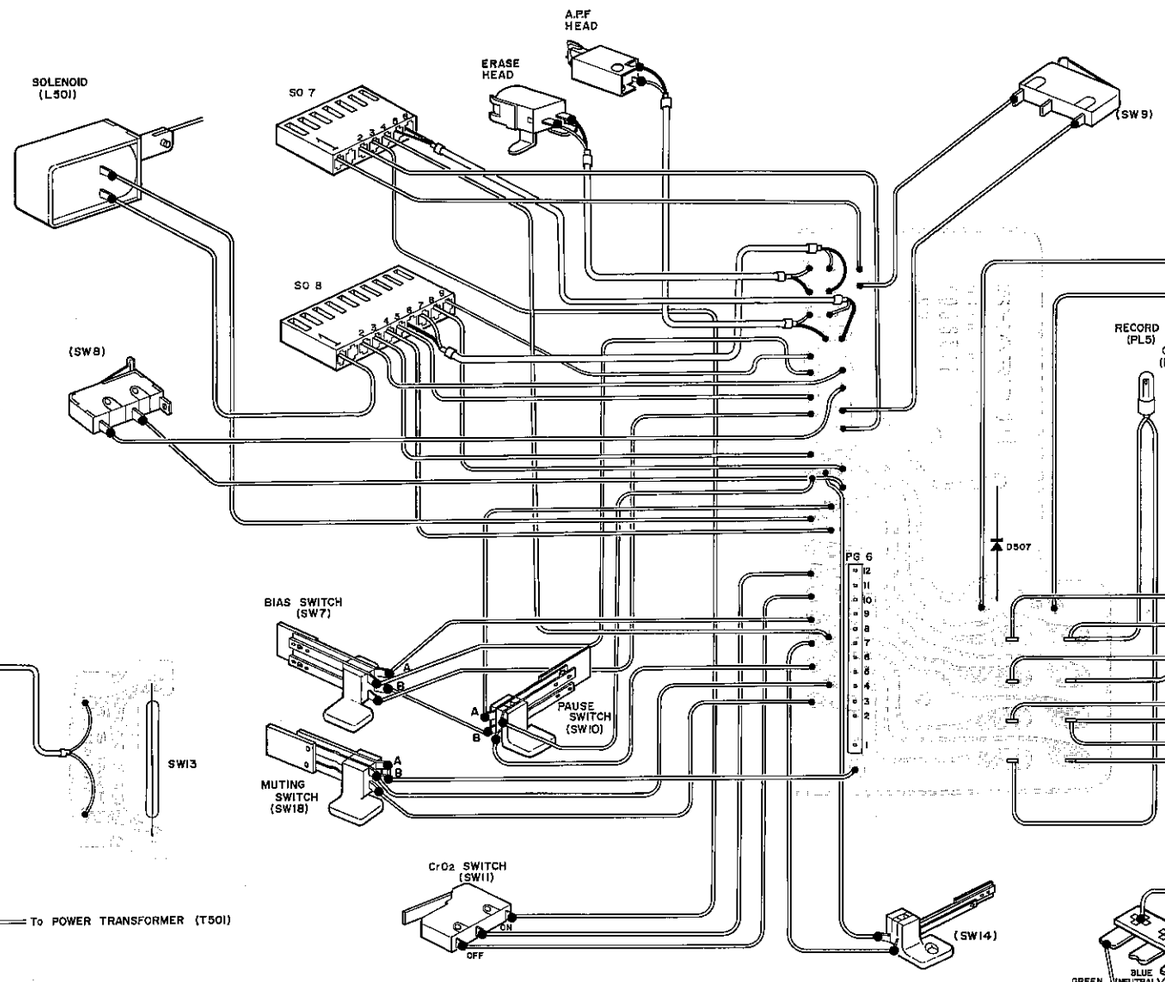
Specifications or wiring diagrams of this model are subject to change for the improvement without prior notice.

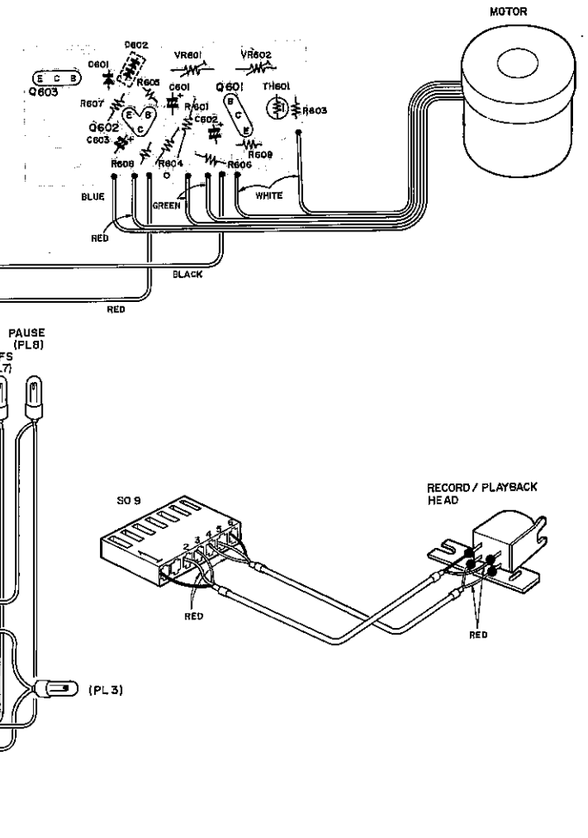
SCHEMATIC DIAGRAM

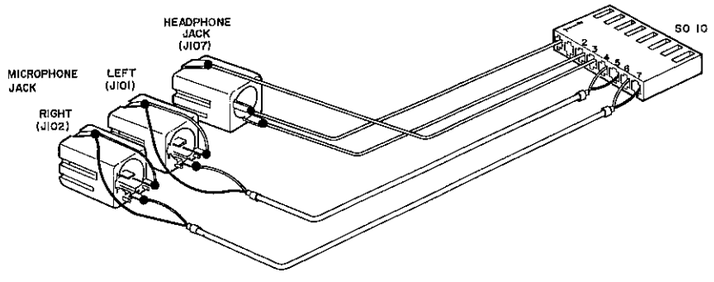


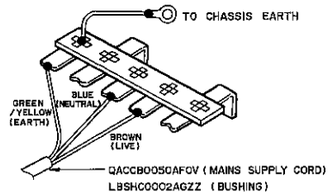
PRINTED CIRCUIT BOARD WIRING SIDE (1/2)



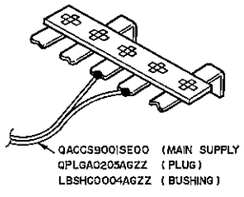




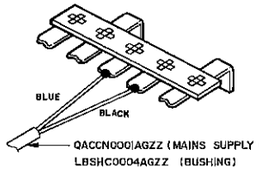




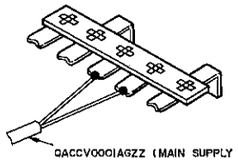
MAINS SUPPLY CORD CONNECTION FOR UK



MAINS SUPPLY CORD CONNECTION FOR SEV

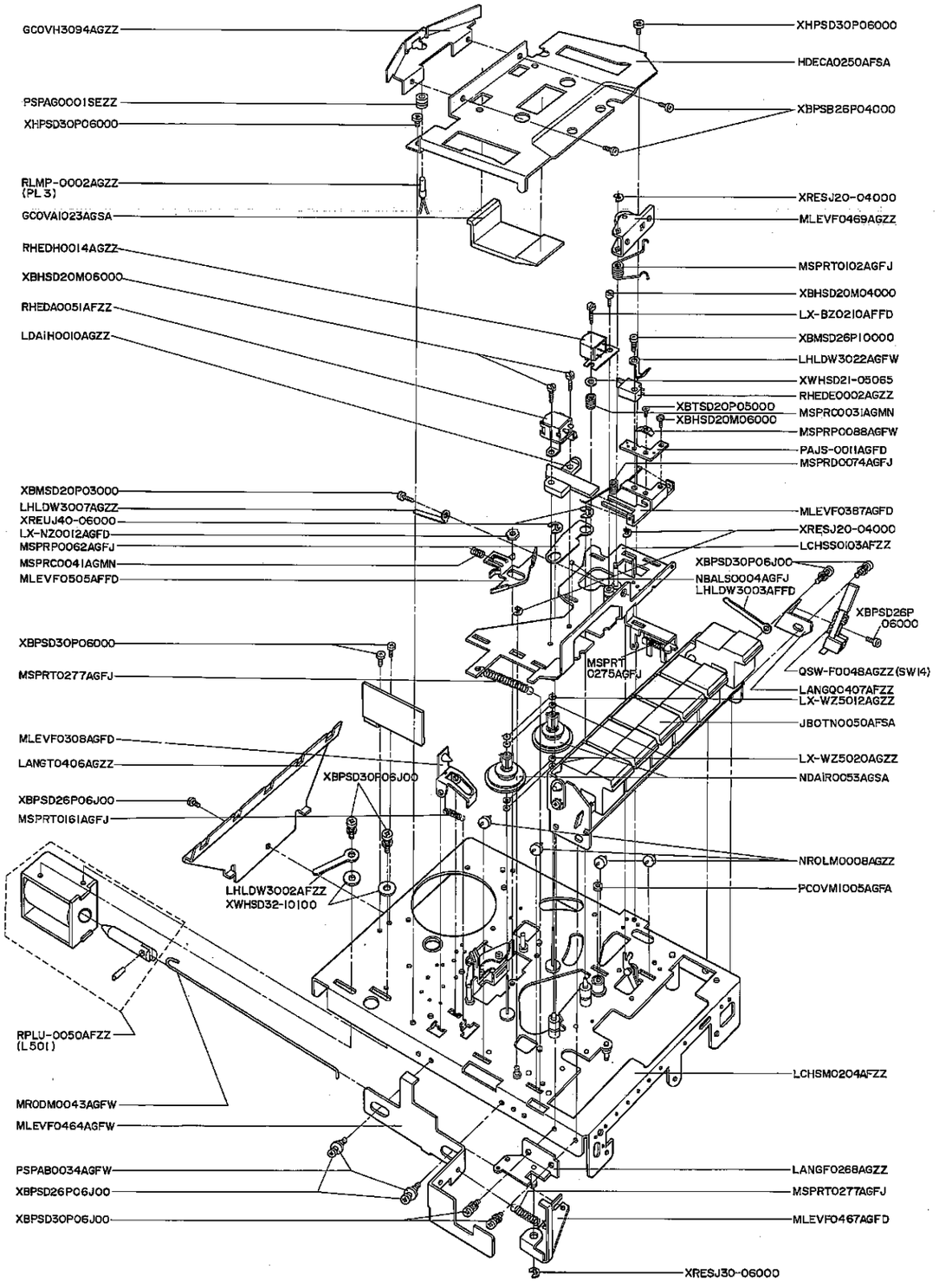


MAINS SUPPLY CORD CONNECTION FOR SEMKO

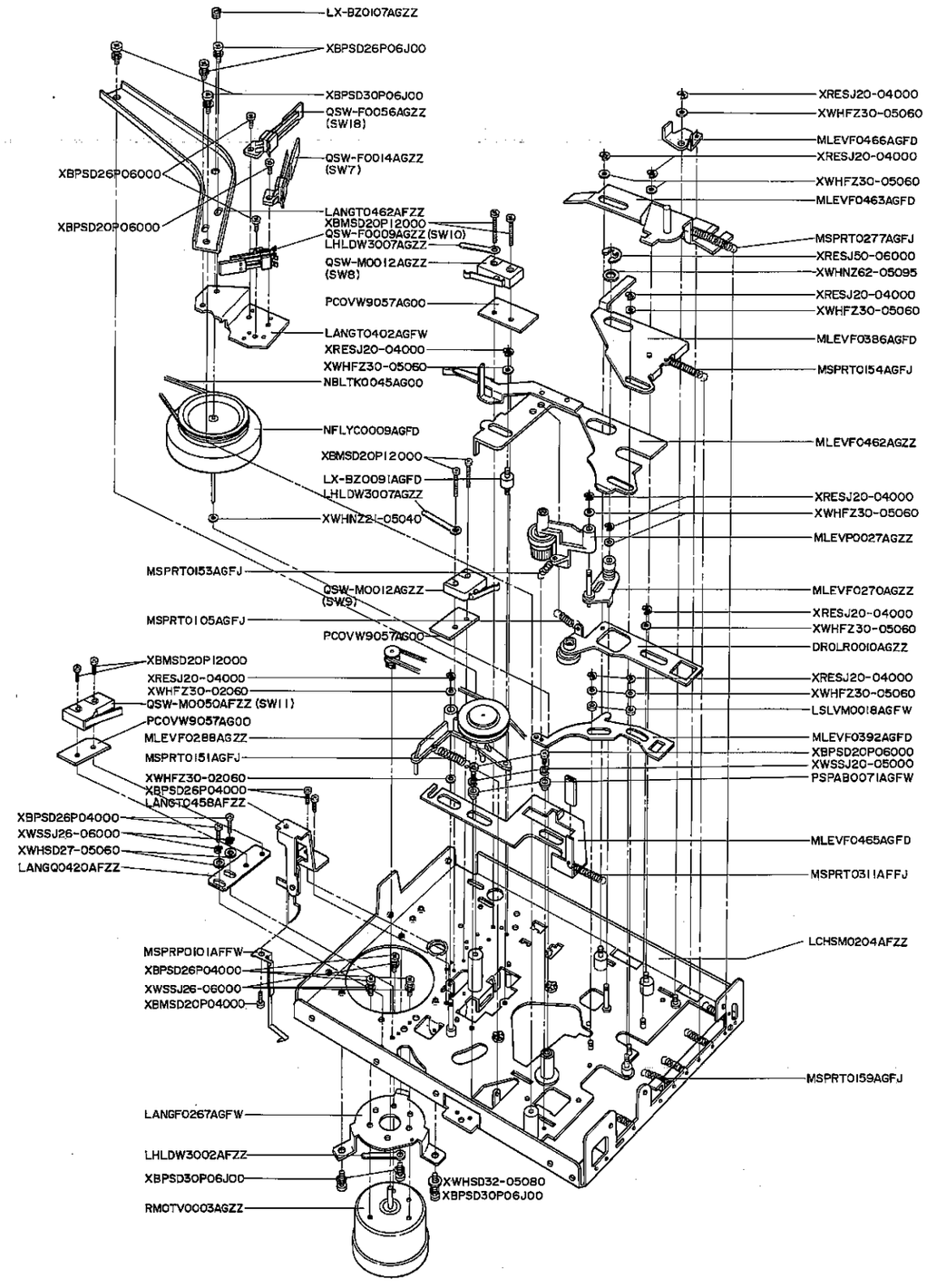


MAINS SUPPLY CORD CONNECTION FOR SEEG

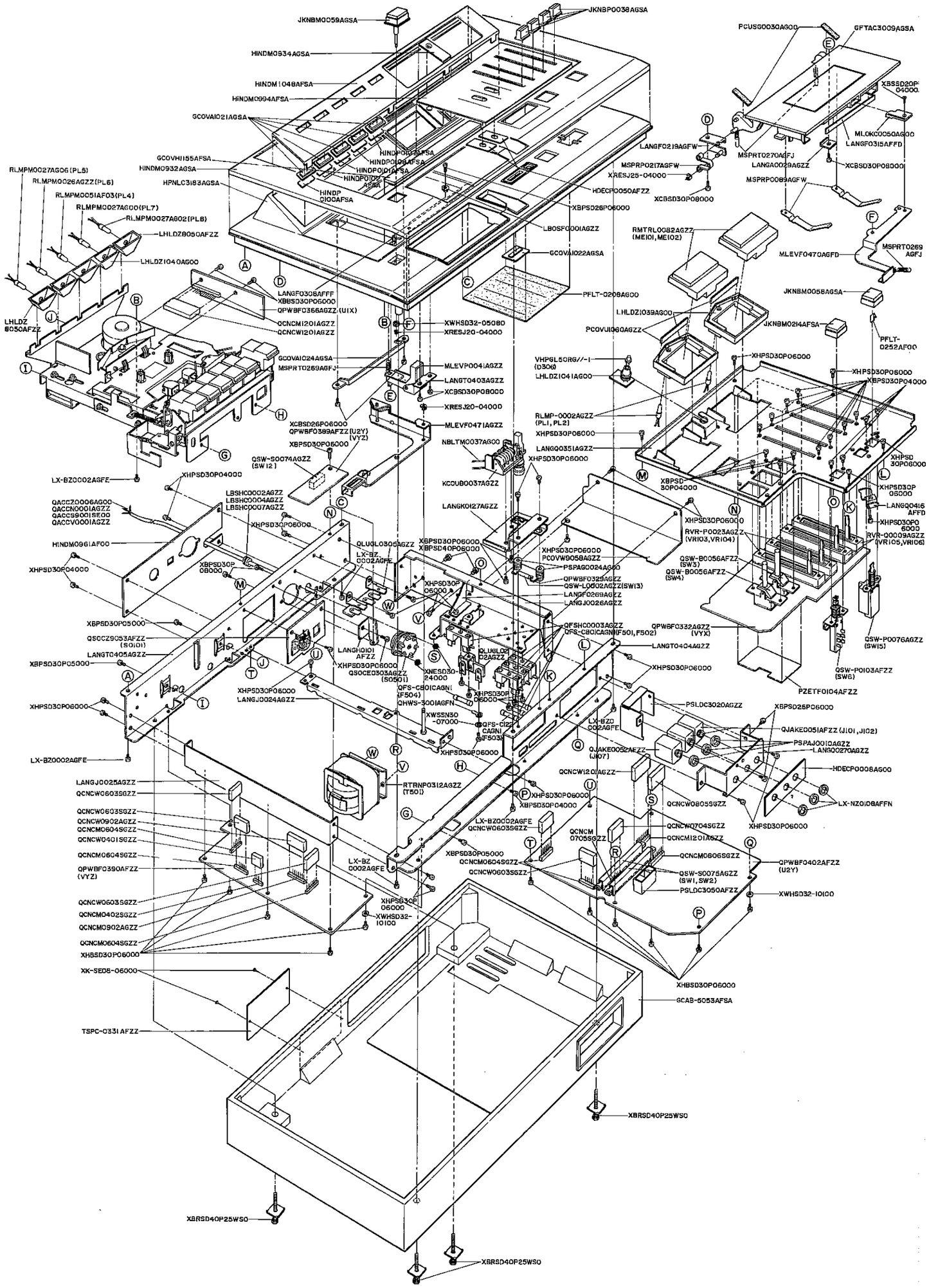
PRINTED CIRCUIT BOARD WIRING SIDE (2/2)



MECHANISM EXPLODED TOP VIEW



MECHANISM EXPLODED BOTTOM VIEW



CABINET EXPLODED VIEW

PARTS LIST

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER 2. REF. NO.
3. PART NO. 4. DESCRIPTION

REF. NO.	PART NO.	DESCRIPTION	CODE
		CONTROLS	
VR101, VR102	RVR-M0093AGZZ	10K ohm, Playback Level Adjust	AC
VR103, VR104	RVR-P0023AGZZ	50K ohm, RECORD LEVEL	AP
VR105, VR106	RVR-Q0009AGZZ	50K ohm, PLAY LEVEL	AP
VR107, VR108	RVR-M0094AGZZ	5K ohm, Record Sensitivity Adjust (Normal Tape)	AC
VR109, VR110	RVR-M0094AGZZ	5K ohm, Record Sensitivity Adjust (CrO_2 Tape)	AC
VR111, VR112	RVR-M0094AGZZ	5K ohm, Meter Sensitivity Adjust	AC
VR301, VR302	RVR-M0108AFZZ	20K ohm, Bias Current Adjust	AC
VR601, VR602	Not Available	Part of Motor	
		TRANSISTORS	
Q101, Q102	VS2SC733-Y/-1	Equalizer Amp. (CrO_2 Tape)	AF
Q103, Q104	VS2SC733GR/-1	Record 1st Amp.	AF
Q105, Q106	VS2SA562-Y/-1	Record 2nd Amp.	AG
Q107, Q108	VS2SC733-Y/-1	Headphone Amp.	AF
Q109 Q110	VS2SC733-Y/-1	Meter Amp.	AF
Q111, Q112	VS2SC733GR/-1	Muting	AF
Q113	VS2SC733GR/-1	Muting	AF
Q201	VS2SC1407-S1F	Ripple Filter	AF
Q301, Q302	VS2SC1213-B-3	Bias Oscillator	AF
Q303	VS2SC1213-B-3	Indicator (CrO_2)	AF
Q304	VS2SC733-Y/-1	Peak Level Indicator	AF
Q305	VS2SC733-Y/-1	Peak Level Indicator	AF
Q501, Q502	VS2SC732-B/-1	Auto Program Finder Audio Amp. & Limiter	AF
Q503, Q504	VS2SC733-B/-1	Schmidt Trigger	AF
Q505	VS2SA562-Y/-1	Memory	AG
Q601, Q602	Not Available	Part of Motor	

REF. NO.	PART NO.	DESCRIPTION	CODE
		DIODES	
D101, D102	VHD1N60////-1	Switching	AC
D103, D104	VHD1S1555V/1G	Switching	AC
D105, D106	VHD1S1555V/1G	Switching	AC
D107, D108	VHD1S1555V/1G	Switching	AC
D109, D110	VHD1S1555V/1G	Switching	AC
D111, D112	VHD1S1555V/1G	Switching	AC
D113, D114	VHD1S1555V/1G	Switching	AC
D115, D116	VHD1N60////-1	Meter Rectifier	AC
D301	VHD1S1555V/1G	Switching	AC
D302	VHD1S1555V/1G	Switching	AC
D303	VHD1N60////-1	Peak Level Indicator	AC
D304	VHD1N60////-1	Peak Level Indicator	AC
D305	VHD1S1555V/1G	Miss Working Prevention	AC
D306	VHPGL50RG//-1	Peak Level Indicator	AP
D501	VHD1S1555V/1G	Clamping	AC
D502	VHD1S1555V/1G	Back Current Prevention	AC
D503	VHD1S1555V/1G	Clamping	AC
D504	VHD1S1886//-1	Surge Absorber	AD
D505	VHD1S1555V/1G	Rectifier	AC
D506	VHD1S1555V/1G	Rectifier	AC
D507	VHD1S1886//-1	Protection Circuit	AD
D508	VHD1S1555V/1G	Thermal Compensation	AC
D509	VHD1N60////-1	Rectifier	AC
D510	VHD1N60////-1	Rectifier	AC
D511	VHVHV46-G//-1	Time Constant	AD
D512, D513	VHD1S1886//-1	Rectifier	AD
D514, D515	VHD1S1886//-1	Rectifier	AD
D601, D602	Not Available	Part of Motor	
ZD101, ZD102	VHE02Z6R8A/-1	Constant Voltage	AE
ZD201	VHEBZ-192//1G	Constant Voltage	AG
SCR501	VHSIRC5////-1	Silicon Controlled Rectifier	AK
		COILS	
L101, L102	RCILL0050AFZZ	19 KHz Low Pass Filter	AL

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE
L103, L104	RCILZ0051AFZZ	Record Equalizer	AD
L105, L106	RCILZ0051AFZZ	Record Equalizer	AD
L301, L302	RCILB0087AGZZ	Bias Step-up	AF
L303	RCILB0085AGZZ	Bias Oscillator	AF
L501	RPLU-0050AFZZ	Solenoid	AQ
L601	Not Available	Part of Motor	
		TRANSFORMERS	
T101, T102	RTRNS0027AGZZ	Headphone Output	AE
T501	RTRNP0312AGZZ	Power	BC
		INTEGRATED CIRCUITS	
IC101, IC102	RH-IX0437AGZZ	Audio Amp.	AH
IC103, IC104	RH-IX0431AGZZ	Dolby Noise Reduction Circuit	AY
		MISCELLANEOUS	
	DROLR0010AGZZ	Roller, Rewind	AK
	GCAB-5053AFSA	Cabinet, Wood	BB
	GCOVA1021AGSA	Cover, Indicator	AB
	GCOVA1022AGSA	Window, Counter	AC
	GCOVA1023AGSA	Illumination, Tape	AC
	GCOVA1024AGSA	Illumination, Lamp	AC
	GCOVH1155AFSA	Cover, Head	AD
	GCOVH3094AGZZ	Reflector, Tape Illumination Lamp	AC
	GFTAC3009AGSA	Lid, Cassette Compartment	AH
	HDECA0250AFSA	Bracket, Cassette Compartment Bottom	AH
	HDECP0008AG00	Plate, Jacks	AB
	HDECP0050AFZZ	Plate, Slide, Switch	AB
	HINDM0932AGSA	Decoration, Tape Counter	AZ
	HINDM1048AFSA	Decoration, Level Meter	—
	HINDM0994AFSA	Decoration, Record/Playback Level	AG
	HINDM0961AF00	Decoration, REC/PB Socket	AE
	HINDM0934AGSA	Decoration, Peak Level Indicator	AF
	HINDP0100AFSA	Indication Plate, RECORD	AB
	HINDP0101AFSA	Indication Plate, DOLBY NR	AB
	HINDP0102AFSA	Indication Plate, CrO_2	AB
	HINDP0107AFSA	Indication Plate, PAUSE	AB
	HINDP0108AFSA	Indication Plate, APFS	AB
	HPNLC3183AGSA	Panel, Top	AU
	JBOTN0050AFSA	Button Assembly	AV
	JKNBM0058AFSA	Knob, POWER	AF
	JKNBM0059AGSA	Knob, EJECT	AF
	JKNBM0214AFSA	Knob, APFS	AF
	JKNBP0038AGSA	Knob, RECORD LEVEL/ PLAY LEVEL	AD
	KCOUB0037AGZZ	Counter	AP

REF. NO.	PART NO.	DESCRIPTION	CODE
	LANGA0029AGZZ	Bracket, Cassette Compartment Lid	AA
	LANGF0219AGFW	Bracket, Compartment Shaft, Left Hand	AB
	LANGF0267AGFW	Bracket, Motor	AD
	LANGF0268AGZZ	Bracket, Auto Stop Lever	AE
	LANGF0269AGZZ	Bracket, Strengthen, Right	AB
	LANGF0308AFFF	Bracket, Top Panel	AC
	LANGF0315AFFD	Bracket, Cassette Compartment Lid	AB
	LANGH0101AFZZ	Bracket, REC/PB Socket P.W.B.	AB
	LANGJ0024AGZZ	Bracket, Center	AE
	LANGJ0025AGZZ	Bracket, Left Side	AD
	LANGJ0026AGZZ	Bracket, Right Side	AE
	LANGK0127AGZZ	Bracket, Counter	AD
	LANGQ0270AGZZ	Bracket, Jacks	AC
	LANGQ0351AGZZ	Bracket, Record Level Control	AH
	LANGQ0407AFZZ	Bracket, Leaf Switch	AB
	LANGQ0416AFFD	Bracket, Wire Retaining	AB
	LANGQ0420AFZZ	Bracket, Crome Switch Adjust	AB
	LANGT0402AGFW	Bracket, Switch Retaining	AD
	LANGT0403AGZZ	Bracket, Eject Lever	AB
	LANGT0404AGZZ	Bracket, Front	AG
	LANGT0405AGZZ	Bracket, Rear	AG
	LANGT0406AGZZ	Bracket, Illumination Lamp	AD
	LANGT0458AFZZ	Bracket, CrO_2 Tape	AE
	LANGT0462AFZZ	Bracket, Flywheel	AE
	LBOSF0001AGZZ	Spacer, Eject Lever	AB
	LBSHC0002AGZZ	Bushing, Mains Supply Cord	AB
	LBSHC0004AGZZ	Bushing, Mains Supply Cord	AC
	LBSHC0007AFZZ	Bushing, AC Supply Cord	AB
	LCHSM0204AFZZ	Mechanism Mounting Plate	AW
	LCHSS0103AFZZ	Sub-chassis	AK
	LDAIH0010AGZZ	Head Mount, Erase	AB
	LHLDW3002AFZZ	Wire Holder	AA
	LHLDW3003AFFD	Wire Holder	AA
	LHLDW3007AGZZ	Wire Holder	AA
	LHLDW3022AGFW	Wire Holder	AA
	LHLDZ1039AG00	Holder, Level Meter	AE
	LHLDZ1040AG00	Holder, Indicator Lamp, CrO_2/DOLBY NR/APFS	AE
	LHLDZ1041AG00	Holder, Peak Level Indicator	AB
	LHLDZ8050AFZZ	Holder, Indicator Lamp, REC/PAUSE	AC
	LSLVM0018AGFW	Spacer, Fast Forward Roller Lever	AA
	LX-BZ0091AGFD	Screw, Brake Lever	AB
	LX-BZ0107AGZZ	Screw, Thrust Adjust	AB
	LX-NZ0108AFFN	Nut, Microphone/Headphone Jacks	AB
	LX-NZ0012AGFD	Nut, Brake Lever	AB
	MLEVF0270AGZZ	Lever, Fast Forward Roller	AE
	MLEVF0288AGZZ	Lever, Slip Roller	AK
	MLEVF0308AGFD	Lever, Record Safety	AD
	MLEVF0386AGFD	Lever, APFS Operating	AD
	MLEVF0387AGFD	Lever, APFS Operating	AD
	MLEVF0392AGFD	Lever Fast Forward	AB
	MLEVF0462AGZZ	Lever, Brake Connecting	AE
	MLEVF0463AGFD	Lever, Record Connecting	AE
	MLEVF0464AGFW	Lever, Eject Prevention	AD

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE
	MLEVF0465AGFD	Lever, Pause Operation	AD
	MLEVF0466AGFD	Lever, Record Prevention	AC
	MLEVF0467AGFD	Lever, Auto Stop	AD
	MLEVF0469AGZZ	Lever, Pressure Roller	AG
	MLEVF0470AGFD	Lever, Eject, Steel	AD
	MLEVF0471AGZZ	Lever, Record/Playback	AG
	MLEVF0505AFFD	Lever, Brake	AC
	MLEVP0027AGZZ	Lever, Fast Forward Roller	AN
	MLEVP0041AGZZ	Lever, Eject	AC
	MLOKC0050AG00	Lever, Lock	AC
	MRODM0043AGFW	Rod, Auto Stop	AC
	MSPRC0031AGMN	Spring, Head Azimuth	AA
	MSPRC0041AGMN	Spring, Brake Lever	AA
	MSPRD0074AGFJ	Spring, Program Finder Head Lever	AB
	MSPRP0062AGFJ	Spring, Sub-chassis Retainer	AB
	MSPRP0088AGFW	Spring, A.P.F. Head Azimuth Adjust	AA
	MSPRP0089AGFW	Spring, Cassette Retaining	AB
	MSPRP0101AFFW	Spring, CrO_2 Detector	AC
	MSPRP0217AGFW	Spring, Compartment Shaft	AB
	MSPRT0102AGFJ	Spring, Pressure Roller Lever	AB
	MSPRT0105AGFJ	Spring, Rewind Roller	AB
	MSPRT0151AGFJ	Spring, Slip Roller Lever	AA
	MSPRT0153AGFJ	Spring, Fast Forward Lever	AA
	MSPRT0154AGFJ	Spring, Record Connecting Lever	AA
	MSPRT0159AGFJ	Spring, Pressure Lever	AA
	MSPRT0161AGFJ	Spring, Record Safety Lever	AA
	MSPRT0269AGFJ	Spring, Eject Lever	AA
	MSPRT0270AGFJ	Spring, Cassette Compartment Lid	AA
	MSPRT0275AGFJ	Spring, Pressure Lever	AB
	MSPRT0277AGFJ	Spring, Eject Lever	AB
	MSPRT0311AFFJ	Spring, Pause	AB
	NBALS0004AGFJ	Ball, 3ϕ	AA
	NBLTK0045AG00	Belt, Drive	AD
	NBLTM0037AG00	Belt, Counter	AD
	NDAIR0053AGSA	Turntable, Take-up/Supply	AF
	NFLYC0009AGFD	Flywheel	AL
	NROLM0008AGZZ	Roller, Sub-chassis	AB
	PAJS-0011AGFD	Plate, Azimuth Adjust	AB
	PCOVM1005AGFA	Washer, Oil Cut	AA
	PCOVU1060AGZZ	Cover, Illumination	AC
	PCOVW9058AGZZ	Insulator, AC Power Supply	AC
	PCOVW9057AG00	Insulator, Auto Stop Switch	AA
	PCUSG0030AG00	Cushion, Cassette Compartment Lid	AA
	PFLT-0208AG00	Felt, RECORD LEVEL	AA
	PFLT-0252AF00	Felt, POWER/SLEEP Switch	AA
	PSLDC3020AGZZ	Bracket, Shield	AC
	PSLDC3050AFZZ	Bracket, Shield, Low Pass Filter	AD
	PSPAB0034AGFW	Spacer, Eject Prevention Lever	AA
	PSPAB0071AGFW	Spacer, Pause Lever	AA
	PSPAG0001SEZZ	Holder, Lamp	AA
	PSPAG0024AG00	Spacer, Reed Switch Board	AA
	PSPAJ0010AGZZ	Spacer, Jacks	AB
	PZETF0104AFZZ	Insulator, Transformer	AA
	PZETV0007TAZZ	Cover, Tip	AA
	QACCN0001AGZZ	Mains Supply Cord (SEMKO)	AP
	QACCS9001SE00	Mains Supply Cord (SEV)	AG
	QACCV0001AGZZ	Mains Supply Cord (SEEG)	AN
	QACCB0050AF0V	Mains Supply Cord (SUK)	AH
	QCNCM0402SGZZ	Plug, 4 Pin	AD
	QCNCM0604SGZZ	Plug, 6 Pin	AD
	QCNCM0705SGZZ	Plug, 7 Pin	AE
	QCNCM0806SGZZ	Plug, 8 Pin	AE
	QCNCM0902AGZZ	Plug, 9 Pin	AE
	QCNCM1201AGZZ	Plug, 12 Pin	AE
	QCNCW0401SGZZ	Socket, 4 Pin	AB
	QCNCW0603SGZZ	Socket, 6 Pin	AB
	QCNCW0704SGZZ	Socket, 7 Pin	AC
	QCNCW0805SGZZ	Socket, 8 Pin	AC
	QCNCW0902AGZZ	Socket, 9 Pin	AC
	QCNCW1201AGZZ	Socket, 12 Pin	AC
	QCNW-0031AGZZ	Connecting Cord	AG
F503	QFS-C122CAGNI	Fuse, 1.25AT	AE
F501, F502, F504	QFS-C801CAGNI	Fuse, 800mAT	AE
	QFSHC0003AGZZ	Holder, Fuse	AD
	QHWS-3001AGFN	Lug Terminal, Ground	AA
J101, J102	QJAKE0051AFZZ	Jack, Microphones	AE
J107	QJAKE0052AFZZ	Jack, Headphones	AE
	QLUGL0202AGZZ	Lug Terminal, 2 Terminal	AB
	QLUGL0305AGZZ	Lug Terminal, 3 Terminal 2 Ground	AC
	QLUGQ0104CEFW	Lug Terminal	AA
	QLUGQ0105AGZZ	Lug Terminal, Test Point	AA
	QLUGQ0107CEFN	Lug Terminal	AA
	QLUGZ0101SEFW	Lug Terminal	AA
	QLUGZ0103CEFW	Lug Terminal, Test Point	AA
	QPLGA0205AGZZ	Plug, Mains Supply Cord	AK
	QPWBF0329AGZZ	Printed Wiring Board, Reed Switch	AC
	QPWBF0332AGZZ (VYX)	Printed Wiring Board, Record/Play Level Control	AL
	QPWBF0366AFZZ (U1X)	Printed Wiring Board, Pilot Lamp	AE
	QPWBF0389AFZZ	Printed Wiring Board, REC/PB Socket	AD
	QPWBF0402AFZZ (VYZ) (U2Y)	Printed Wiring Board, Record/Playback Amp.	AQ
	QPWBF0390AFZZ (VYZ)	Printed Wiring Board, Auto Stop	AK
SO501	QSOCE0303AGZZ	Socket, Voltage Selector	AH
SO101	QSOCZ9053AFZZ	Socket, REC/PB	AH
SW3	QSW-B0056AFZZ	Switch, INPUT	AM
SW4	QSW-B0056AFZZ	Switch, DOLBY NR	AM
SW10	QSW-F0009AGZZ	Switch, Pause	AF
SW7	QSW-F0014AGZZ	Switch, Bias	AF
SW14	QSW-F0048AGZZ	Switch, Auto Stop	AE
SW18	QSW-F0056AGZZ	Switch, Muting	AF
SW13	QSW-L0002AGZZ	Switch, Reed Type	AG
SW9	QSW-M0012AGZZ	Switch, Muting	AF
SW8	QSW-M0012AGZZ	Switch, Auto Stop	AF
SW11	QSW-M0050AFZZ	Switch, CrO_2	AG
SW15	QSW-P0076AGZZ	Switch, Power	AM
SW6	QSW-P0103AFZZ	Switch, APFS	AG
SW12	QSW-S0074AGZZ	Switch, LOW/HIGH	AE
SW1, SW2	QSW-S0075AGZZ	Switch, Record/Playback	AH
	QTIPF0001CEYW	Tip	AA

PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE
	QTIPZ0002SGZZ	Tip, Connector	AA
	RHEDA0051AFZZ	Head, Erase	AN
	RHEDE0002AGZZ	Head, APF	AP
	RHEDH0014AGZZ	Head, Record/Playback	BG
PL6	RLMPM0026AGZZ	Pilot Lamp, CrO_2	AE
PL7	RLMPM0027AG00	Pilot Lamp, APFS	AE
PL8	RLMPM0027AG02	Pilot Lamp, PAUSE	AE
PL5	RLMPM0027AG06	Pilot Lamp, RECORD	AE
PL4	RLMPM0051AF03	Pilot Lamp, DOLBY NR	AE
PL1, PL2	RLMP-0002AGZZ	Pilot Lamp, Meter Illumination	AE
PL3	RLMP0002AGZZ	Pilot Lamp, Cassette Illumination	AE
	RMOTV0003AGZZ	Motor	BB
ME101, ME102	RMTRL0082AGZZ	Meter, Record/Playback Level	AT
	RTPEK0034AGZZ	Cassette Tape	AP
	TSPC-0331AFZZ	Indication Plate, Specification	AC

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